

BAYER AG

*EP 654468-A1

93.11.23 93DE-433863 (95.05.24) COTD 249/12, A01N 47/38

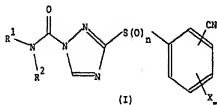
Subst. carbamoyl-triazole derivs. - useful as herbicides esp.

selective herbicides for weed control in crops (Ger)

C95-086934 R(BECH DEES FR GB IT LI NL)

Addnl. Data: ANDREE R, DOLLINGER M, SANTEL H
94.11.10 94EP-117746

Subst. carbamoyl triazole derivs. of formula (I) are new:



m = 0-4;

n = 0-2;

R¹, R² = opt. subst. alkyl, alkenyl or alkynyl; or

C(7-D13, 14-U1A, 14-V2) 3

R¹+R² = alkanediyl;

X = halogen, OH, NH₂, SH or opt. subst. alkyl, alkoxy, alkylthio, alkylamino, alkanoylamino, alkylsulphonylamino, cycloalkoxy, cycloalkylthio, cycloalkylamino, cycloalkylalkoxy, cycloalkylalkylthio, cycloalkylalkylamino, aryloxy, arylthio, arylamino, arylcarbonyl, arylsulphonyl, arylalkyl, arylalkoxy, arylalkylthio, arylalkylamino, arylalkylcarbonyl or arylalkylsulphonyl.

Also claimed are subst. triazoles of formula (III) (see "Preparation").

USE

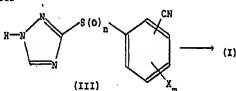
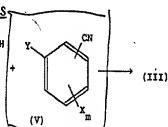
(I) are defoliants, desiccants and esp. herbicides. They are esp. suitable for the selective control of weeds in crops such as cereals, beet, soya and cotton. (III) are intermediates in the prepn. of (I).

Suitable amts. for use are 10 g-10 kg/ha., esp. 50 g -5 kg/ha..

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PREPARATION

(II)

STARTING MATERIALS

Y = halogen.

EXAMPLE

A mixt. of 3.5 g 3-(4-cyano-2,5-difluorophenylthio)-1H-1,2,4-triazole, 2.1 g N,N-diethylcarbonic acid chloride and 20 ml pyridine were stirred for 3 days at 20 °C. The mixt. was then diluted to double vol. with water, filtered and washed with 1N HCl and water. 5.5 g (91.5% yield) 3-(4-cyano-2,5-difluorophenylthio)-1-thiylaminocarbonyl-1H-1,2,4-triazole of m.p. 80 °C were thus obtd.

This cpd. had 80%, 90%, and 50% effectiveness against *Galium*, *Ipomoea* and *Alpecurus* resp., without harming rape or cotton plants. (AC)

(16pp1401DwgNo.0)0

SR-EP332133 EP422369

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